Amendments to the Claims

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of controlling a printing operation in an inkjet printer, comprising:

registering one or more kinds of user printing sheets along with feature values of the user printing sheets;

obtaining a feature value of a fed printing sheet to determine a kind of the fed printing sheet when a printing command is applied; and

controlling a head driver according to the determined kind of the fed printing sheet,

wherein the determination of the kind of the fed printing sheet comprises:

obtaining the feature value of the fed printing sheet when the printing command is applied,

comparing the obtained feature value with the registered feature values, and

determining the fed printing sheet as belonging to the registered kinds of the user printing sheets when the obtained feature value corresponds to the registered feature values.

2. (Original) The method of claim 1, wherein the feature value of the fed printing sheet corresponds to reflected light obtained from radiated light having a predetermined strength.

3. (Original) The method of claim 2, wherein the registration of the kinds of the user printing sheets with the feature values comprises:

applying a sensing command for the fed printing sheet;

obtaining a feature value of a printing sheet to be registered;

applying a printing sheet registration command; and

registering and storing the obtained feature value and a kind of the printing sheet corresponding to the obtained feature value.

4. (Original) The method of claim 3, wherein the application of the sensing command is performed by one of a host computer providing printing data to the inkjet printer and a manipulation panel of the inkjet printer.

5. (Original) The method of claim 3, wherein the application of the printing sheet registration command is performed by one of a host computer providing printing data to the inkjet printer and a manipulation panel of the inkjet printer.

6. (Currently Amended) The method of claim 1, wherein the determination of the kind of the fed printing sheet further comprises:

~~obtaining the feature value of the fed printing sheet when the printing command is applied;~~

~~comparing the obtained feature value with the registered feature values in the registration of the feature values of the user printing sheets;~~

~~determining the fed printing sheet as belonging to the registered kinds of the user printing sheets when the obtained feature value corresponds to the registered feature values; and~~

identifying the kind of the fed printing sheet according to the feature value of the fed printing sheet and with reference to a predetermined identification table when the obtained feature value does not correspond to the registered feature values

7. (Original) A computer-readable recording medium on which a computer-executable program is recorded, the computer-executable program comprising:

a first program that pre-registers a kind of a printing sheet designated by a user and determines whether a currently fed printing sheet belongs to the registered kind of the printing sheet depending on a feature value of the currently fed printing sheet;

a second program that determines the kind of the currently fed printing sheet based on the feature value of the currently fed printing sheet and with reference to a predetermined identification table when it is determined in the first program that the currently fed printing sheet does not belong to the kind of the printing sheet registered by the user; and

a third program that creates control data to control an operation of a head driver according to the kind of the currently fed printing sheet determined by the first and second programs.

8. (Original) An apparatus to control a printing operation in an inkjet printer, comprising:

a sensor obtaining a feature value of a fed printing sheet;

a storage storing the feature value and the kind of user printing sheets corresponding to the feature value as a table;

a system controller registering one or more kinds of user printing sheets along with feature values of the user printing sheets and determining a kind of a fed printing sheet using a feature value of the fed printing sheet provided from the sensor and with reference to one of the table stored in the storage and an identification table included therein when a printing command is applied; and

a print controller creating control data corresponding to the kind of the fed printing sheet determined by the system controller and controlling a head driver according to the control data.

9. (Currently Amended) A method of controlling a printing operation in an inkjet printer, comprising:

registering predetermined types of user printing sheets together with at least one characteristic feature thereof, including;

sensing a currently fed printing sheet together with at least one unique feature value thereof to be registered,

applying a printing sheet registration command, and

registering and storing the sensed at least one unique feature value and kind of printing sheet corresponding to the at least one unique feature value;

determining the kind of printing sheet fed to the inkjet printer upon a print command by comparing at least one characteristic feature of a fed printing sheet with the at least one characteristic feature of the registered user printing sheets; and

controlling a head driver according to the determined kind of fed printing sheet.

10. (Cancelled)

11. (Currently Amended) The method of claim 9~~10~~, wherein the operation of applying a printing sheet registration command is performed by one of a host computer providing printing data to the printer and a manipulation panel of the printer.

12. (Cancelled)

13. (Cancelled)

14. (Original) An apparatus to control a printing operation in a printer, comprising:

a sensor to sense at least one feature value of a fed printing sheet;

a system controller to register kinds of user printer sheets designated by a user together with at least one feature value thereof, and to determine whether a fed printing sheet belongs to the registered kind according to a feature value of the fed printing sheet, and if not, then determine the kind of the fed printing sheet based on the feature value of the fed printing sheet by referring to an identification table therein; and

a print controller to control the head driver according to the determined kind of fed printing sheet.

15. (Original) The apparatus of claim 14, wherein the print controller controls the head driver by creating control data corresponding to the kind of fed printing sheet determined by the system controller and controlling the head driver accordingly.

16, (Original) The apparatus of claim 15, wherein the control data comprises data relating to at least one of a scanning speed of the head driver, an amount of ink to be discharged, a discharge pressure of ink, or a specific number of ink nozzles to be used.

17. (Original) The apparatus of claim 14, wherein the sensor comprises:

an emitting unit including a light emitting diode to emit light;

a receiving unit including a photo transistor to receive light reflected from the printing sheet and to convert the amount of light received into a current; and

an analog-to-digital converter to convert the current into a digital signal to be provided to the system controller.

18. (Cancelled)

19. (Currently Amended) The apparatus of claim 2218, further comprising:

a head driver to drive a print head, wherein the controller controls one of a scanning speed of the head driver, an amount of ink to be discharged on the a printing sheet, a discharge pressure of the ink, and a specific number of ink nozzles to be used according to head control data retrieved from one of the registration storage unit and the pre-stored identification table.

20. (Currently Amended) The apparatus of claim 2218, further comprising:

a head driver to drive a print head, wherein the controller determines a kind current one of the registered printing sheet types and controls the head driver according to the determined registered kind of printing sheet type.

21. (New) A method of controlling a printing operation of a specified printer, the method comprising:

detecting light reflected from a current printing sheet to determine a corresponding feature value;

determining whether a sheet type of the current printing sheet has been registered in the specified printer by determining whether the feature value that corresponds to the current printing sheet is stored in a registration storage unit of the specified printer; and

retrieving print control data to print to the current printing sheet from the registration storage unit when it is determined that the sheet type thereof has been registered in the specified printer, and retrieving print control data to print the current printing sheet from a

general printing sheet identification storage when it is determined that the sheet type thereof has not been registered in the specified printer.

22. (New) An apparatus to control a printing operation in a printer, comprising:

a sensing unit to emit light on one or more unregistered printing sheet types and to receive light reflected from the one or more unregistered printing sheet types to determine one or more unique feature values thereof;

a registration storage unit to register the one or more unregistered printing sheet types and to store the associated one or more unique feature values therein; and

a controller to having access to both the registration storage unit and a pre-stored identification table, which is different from the registration storage unit and identifies pre-stored printing sheet types associated with pre-stored feature values.

23. (New) A computer readable medium containing executable code to control a head driver of a printer, the medium comprising:

a first executable code to a sense one or more unique feature values of one or more unregistered printing sheet types;

a second executable code to control a registration storage unit to register the one or more unregistered printing sheet types with one or more associated unique feature values; and

a third executable code to access at least one of the registration storage unit and a pre-stored identification table, which is different from the registration storage unit and identifies pre-stored printing sheet types associated with pre-stored feature values.